



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,849	09/24/2004	Joseph B. Schutte III	5-303-PCT	8699

24256 7590 03/20/2008  
DINSMORE & SHOHL, LLP  
1900 CHEMED CENTER  
255 EAST FIFTH STREET  
CINCINNATI, OH 45202

EXAMINER
----------

FOLAYAN, TEMITAYO

ART UNIT	PAPER NUMBER
----------	--------------

2625

MAIL DATE	DELIVERY MODE
-----------	---------------

03/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/508,849	<b>Applicant(s)</b> SCHUTTE III, JOSEPH B.	
	<b>Examiner</b> TEMITAYO FOLAYAN	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 3 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections - 37 CFR 1.75(a)***

1. The following is a quotation of 37 CFR 1.75(a):

The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

2. Claims 3 and 12 are objected to under 37 CFR 1.75(a), as failing to conform to particularly point out and distinctly claim the subject matter which application regards as his invention or discovery.

3. Correction of the following is required: Claim 3 lacks proper antecedent basis for its claimed subject matter. Claimed subject matter has not been defined in the dependency structure associated with the claim. Claim 12 lacks proper antecedent basis for "web fed printing press". "Web fed printing press" has not been defined in the dependency structure associated with the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Heidemann (United States Patent 4,057,012) hereinafter referenced as Heidemann.

Regarding claim 1, Heidemann discloses a method of printing comprising: Combining flexographic printing with intaglio printing in a common press (The invention relates to a printing press convertible from intaglio to flexographic printing and vice versa, as disclosed at column 1, lines 6-7).

Regarding claim 2, Heidemann discloses everything claimed as applied above (see claim 1), in addition Heidemann discloses a web fed printing press (A web 1 is fed to drying equipment (not shown) by way of guide rollers 2, 3, a rubber cylinder 4 and guide rollers 5, 6 which are rotatable in the frame of the press, as disclosed at column 2 lines 12-14) comprising: at least one flexographic printing module equipped to apply variable amounts of motion and tension to a web substrate (The web tension can be interrupted or become defective during flexographic printing at those places where the stereotype contains little or no type, As disclosed at column 1 lines 27-30); at least one intaglio printing module equipped to apply variable amounts of motion and tension to said web substrate (With a course for the web set for intaglio printing, the web 1 must not touch the steel cylinder 10 because the surface of the latter moves in the opposite direction to the web 1, as disclosed at column 2 lines 32-35, wherein moving in the opposite direction causes tension to occur); and means for controlling the amounts of motion and tension applied by the flexographic printing module and by the intaglio printing module to said web substrate (It is therefore an object of the invention to improve or ensure accurate transport by appropriate guiding of the web in printing

presses convertible from intaglio to flexographic printing, as disclosed at column 1 lines 39-42).

Regarding claim 12, Heidemann discloses everything claimed applied above (see claim 1), in addition Heidemann discloses wherein said at least one flexographic printing module precedes said at least one intaglio printing module (The invention relates to a printing press convertible from intaglio to flexographic printing and vice versa, as disclosed at column 1, lines 6-7).

Regarding claim 13, Heidemann discloses everything as claimed applied above (see claim 2), in addition Heidemann discloses wherein means for bypassing said at least one intaglio printing module are provided (The feed roller 18 is not required for intaglio printing because in that case feeding takes place by way of the plate cylinder 7 co-operating with the rubber cylinder 4, as disclosed at column 2 lines 58-60, wherein it is considered that if intaglio printing is not required is the same as bypass intaglio printing).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidemann in view of Gates (United States Patent 5,748,806) hereinafter referenced as Gates.

Regarding claim 3, Heidemann discloses everything claimed as applied above (see claim 1), in addition Heidemann discloses wherein said means for controlling the amounts of motion and tension applied to said web substrate by said at least one flexographic printing module and by said at least one intaglio printing module (It is therefore an object of the invention to improve or ensure accurate transport by appropriate guiding of the web in printing presses convertible from intaglio to flexographic printing, as disclosed at column 1 lines 39-42).

Heidemann does not disclose a processor that includes first and second control processors.

Gates in a different area of a system for shared data exchange (column 1 lines 33-40), discloses a host processor and first and second motion control processors (The host adapter of this invention includes a first interface module circuit connectable to the first bus and coupled to the RISC processor. The first interface module circuit transfers information to and from the first bus in response to instructions from and initialization by the RISC processor. The host adapter also includes a second interface module circuit connectable to the second bus and coupled to the RISC processor. The second interface module circuit transfers information to and from the second bus in response to instructions from and initialization by the RISC processor, as disclosed at column 4 lines 13-22, wherein the interface module circuits are considered motion control processors).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device to include: a host processor containing first and second control processors.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device by the teachings of Gates for the purpose of interfacing the host processor with the print device.

Regarding claim 4, Heidemann discloses everything claimed as applied above (see claim 2).

Heidemann does not disclose a control processor that controls motion and tension imparted by printing module.

Gates in a different area of a system for shared data exchange (column 1 lines 33-40), discloses wherein the first motion control processor controls the amounts of motion and tension imparted to the web substrate by the intaglio printing module (The first interface module circuit transfers information to and from the first bus in response to instructions from and initialization by the RISC processor, as disclosed at column 4 lines 15-17, wherein information is considered motion and tension). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device to include: a control processor that controls motion and tension imparted by printing module.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device by the teachings of Gates for the purpose of responding to instructions from the intaglio printing modules.

Regarding claim 11, Heidemann discloses everything claimed as applied above (see claim 2).

Heidemann does not disclose a first and second control processor mounted on a RISC board.

Gates, in a different area of a system for shared data exchange (column 1 lines 33-40), discloses wherein said first motion control processors is mounted in a first RISC based motion control board and said second motion control processor is mounted in a second RISC based motion control board (The host adapter of this invention includes a first interface module circuit connectable to the first bus and coupled to the RISC processor. The first interface module circuit transfers information to and from the first bus in response to instructions from and initialization by the RISC processor. The host adapter also includes a second interface module circuit connectable to the second bus and coupled to the RISC processor. The second interface module circuit transfers information to and from the second bus in response to instructions from and initialization by the RISC processor, as disclosed at column 4 lines 13-22). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device to include: a first and second control processor mounted on a RISC board.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device by the teachings of Gates for the purpose of interfacing the host processor with the print device.



Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidemann in view of Gates further in view of Ebihara (United States Patent 5,033,378) hereinafter referenced as Ebihara.

Regarding claim 6, Heidemann and Gates disclose everything claimed as applied above (see claim 3), in addition Heidemann discloses wherein the means for controlling the amounts of motion and tension applied by the intaglio printing module to said web substrate ((With a course for the web set for intaglio printing, the web 1 must not touch the steel cylinder 10 because the surface of the latter moves in the opposite direction to the web 1, as disclosed at column 2 lines 32-35, wherein moving in the opposite direction causes tension to occur).

Heidemann and Gates do not disclose a reference encoder, said reference encoder generating a reference signal.

Ebihara, in a same area of a printing device discloses a reference encoder, said reference encoder generating a reference signal corresponding to the motion of said web substrate (A phase signal, an output signal of the rotary encoder 33, consists of a reference signal which rises at every turn of the intaglio cylinder 16, as disclosed at column 4 lines 43-46). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann and Gate's invention to include: a reference encoder, said reference encoder generating a reference signal.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann and Gate's invention by the

teachings of Ebihara for the purpose of storing data on the memory of the intaglio printing module.

Regarding claim 14, Heidemann and Gates disclose everything claimed as applied above (see claim 3), in addition Heidemann discloses wherein said means for bypassing said at least one intaglio printing module (The feed roller 18 is not required for intaglio printing because in that case feeding takes place by way of the plate cylinder 7 co-operating with the rubber cylinder 4, as disclosed at column 2 lines 58-60, wherein it is considered that if intaglio printing is not required is the same as bypass intaglio printing).

Heidemann and Gates do not disclose a synthesized reference signal.

Ebihara, in a same area of a printing device discloses a synthesized reference signal, said synthesized reference signal being utilized by the second motion control processor to control the amounts of motion and tension imparted to the web substrate by said at least one flexographic printing module (A reference value memory signal is a signal to cause the reference memories 36a to 36c to read the reference image data through the memory controller 38, which is supplied by turning on a switch, as disclosed at column 4 lines 52-56, wherein reference value memory signal is considered synthesized reference signal). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann and Gate's invention to include: a synthesized reference signal.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann and Gate's invention by the

teachings of Ebihara for the purpose of storing data on the memory of the flexographic printing module.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidemann in view of Gates further in view of Miki (United States Patent 4,684,269) hereinafter referenced as Miki.

Regarding claim 5, Heidemann and Gates disclose everything claimed as applied above (see claim 3).

Heidemann and Gates do not disclose the processors that generate and utilize timing signals.

Miki, in a same area of a printing device discloses wherein said first motion control processor generates a plurality of timing signals and the second motion control processor utilizes said timing signals to control the mounts of motion and tension imparted to the web substrate by the flexographic printing module (To the CPU 20, there are also connected via the data bus a first and a second ribbon control unit 37, 38 which selectively control a ribbon driver circuit 39 to control the ribbon feed motor 40. The first ribbon control unit 37 is connected to the first carriage control unit 28. When the first printing assembly 7 is operated, the first ribbon control unit 37 receives a ribbon-feed timing signal from the first carriage control unit 28, and applies to the ribbon driver circuit 39 a ribbon feed signal in response to the ribbon-feed timing signal, whereby the ribbon feed motor 40 is operated to feed the ribbon in increments of a one-character distance. When the second printing assembly 8 is operated, the second

Art Unit: 2625

ribbon control unit 38 applies to the ribbon driver circuit 39 a ribbon feed signal to operate the ribbon feed motor 40 so as to feed the ribbon continuously at a predetermined rate, as disclosed at column 5 line 59 through column 6 line 7, wherein the ribbon control units are considered motion control processors). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann and Gate's invention to include: processors that generate and utilize timing signals.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann and Gate's invention by the teachings of Miki for the purpose of keeping the printing device operated at a continuous and predetermined rate (as disclosed at column 6 lines 5-7).

Regarding claim 7, Heidemann, Gates and Miki disclose everything as claimed applied above (see claim 5), in addition Miki discloses wherein the first motion control processor utilizes the reference signal generated by the reference-controller to control the amounts of motion and tension imparted to the web substrate by the intaglio printing module (The first ribbon control unit 37 is connected to the first carriage control unit 28. When the first printing assembly 7 is operated, the first ribbon control unit 37 receives a ribbon-feed timing signal from the first carriage control unit 28, and applies to the ribbon driver circuit 39 a ribbon feed signal in response to the ribbon-feed timing signal, as disclosed at column 5 lines 62-69, wherein the first motion control processor is considered the first ribbon control unit and the reference controller is considered the first carriage control unit).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heidemann in view of Miki.

Regarding claim 8, Heidemann disclosed everything claimed as applied above (see claim 2), in addition Heidemann discloses wherein said means for controlling the amounts of motion and tension applied by the flexographic printing module and by the intaglio printing module to said web substrate (It is therefore an object of the invention to improve or ensure accurate transport by appropriate guiding of the web in printing presses convertible from intaglio to flexographic printing, as disclosed at column 1 lines 39-42).

Heidemann does not disclose at least one servo motor on at least one printing module.

Miki, in a same area of a printing device discloses at least one servo motor on said at least one intaglio printing module and at least one servo motor on said at least one flexographic printing module (The platen 1 is driven by a platen drive motor 35 (FIG. 3) in the form of a stepper motor, DC or AC servomotor, or any other suitable drive motor, such that the platen 1 is rotated in selected one of forward and reverse directions as required, through an angle necessary to effect a desired printing operation, as disclosed at column 3 lines 11-17). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device to include: at least one servo motor on at least one printing module.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann's printing device by the teachings of Miki for the purpose of cooperating with the platen to constitute paper feeding means for feeding the paper in a direction perpendicular to a line of printing (as disclosed at column 3 lines 18-21).

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidemann in view of Gates further in view of Miki and further in view of Kasubuchi et al. (United States Patent 3,878,517) hereinafter referenced as Kasubuchi.

Regarding claim 9, Heidemann, Gates and Miki disclose everything as claimed applied above (see claim 7), in addition Gates discloses electrically connected to said first motion control processor (The host adapter of this invention includes a first interface module circuit connectable to the first bus and coupled to the RISC processor, as disclosed at column 4 lines 13-15, wherein if it is a circuit, then it is inherently considered to be connected electrically).

Heidemann, Gates and Miki do not disclose servo motor being mechanically connected to web.

Kasubuchi, in a same area of a printing device discloses wherein said at least one servo motor on said at least one intaglio printing module is mechanically connected to said web substrate (The servomotor 40 is mechanically coupled with the printing head 1 to control the horizontal movements thereof, as disclosed at column 4 lines 54-56). Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Heidemann, Gates and Miki's invention to include: a servo motor being mechanically connected to web.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann, Gates and Miki's invention by the teachings of Kasubuchi for the purpose of entering outputs through the circuits.

Regarding claim 10, Heidemann, Gates and Miki disclose everything as claimed applied above (see claim 7), in addition Gates discloses electrically connected to said first motion control processor (The host adapter of this invention includes a first interface module circuit connectable to the first bus and coupled to the RISC processor, as disclosed at column 4 lines 13-15, wherein if it is a circuit, then it is inherently considered to be connected electrically).

Heidemann, Gates and Miki do not disclose servo motor being mechanically connected to web.

Kasubuchi, in a same area of a printing device discloses wherein said at least one servo motor on said at least one Flexographic printing module is mechanically connected to said web substrate (The servomotor 40 is mechanically coupled with the printing head 1 to control the horizontal movements thereof, as disclosed at column 4 lines 54-56). Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann, Gates and Miki's invention to include: a servo motor being mechanically connected to web.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Heidemann, Gates and Miki's invention by the teachings of Kasubuchi for the purpose of entering outputs through the circuits.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TEMITAYO FOLAYAN whose telephone number is (571)270-3574. The examiner can normally be reached on Monday - Thursday 8:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Application/Control Number: 10/508,849  
Art Unit: 2625

Page 16

/King Y. Poon/  
Supervisory Patent Examiner, Art Unit 2625

TF,  
March 16, 2008